ABSTRACT OF THE DISCLOSURE

The present invention demonstrates that human parathyroid hormone 1-34 [hPTH(1-34)] exerts anti-apoptotic effects on osteoblasts when administered in an intermittent fashion to mice *in vivo*. The present invention further demonstrates that bovine PTH(1-34) [bPTH(1-34)] prevents glucocorticoid-induced apoptosis of osteoblastic and osteocytic cells *in vitro*. Therefore, the present invention demonstrates that the previously established anabolic effects of PTH on the skeleton are mediated by its ability to postpone osteoblast apoptosis, as opposed to a stimulatory effect on osteoblastogenesis. The present invention provides methods of screening agents for anti-apoptotic effects on osteoblasts, wherein such agents stimulate and/or restore bone in osteopenic individuals, or prevent bone loss caused by agents such as glucocorticoids.